

Inside Wallops

National Aeronautics and Space Administration Goddard Space Flight Center

Wallops Flight Facility, Wallops Island, Virginia

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NASA'S 1999 Feats Presage Its Next Millennium

NASA's 1999 achievements extended from terrestrial airport runways to extrasolar planets and addressed concerns ranging from the environmental to the cosmological. Background information is available on the following top 10 stories of 1999 at the URL's listed.

Hubble Illuminates Universe's Rate of Expansion

Hubble scientists found a value for how fast the universe is expanding after eight years of painstaking measurement. The rate of expansion, called the Hubble Constant, is essential to determining the age and size of the universe. Measuring Hubble's constant was one of the three major goals for the telescope when it was launched in 1990. http://oposite.stsci.edu/pubinfo/pr/1999/19/ index.html

Astronomers Find Evidence of First Planet Orbiting a Pair of Stars

Astronomers witnessed for the first time a distant planet passing in front of its star, providing direct and independent confirmation of the existence of extra-solar planets that to date has been inferred only from the wobble of their star. http://bustard.phys.nd.edu/MPS/

Mars Global Surveyor Provides First Global 3-D Map of Mars

An impact basin deep enough to swallow Mount Everest and surprising slopes in Valles Marineris highlight a global map of Mars that will influence scientific understanding of the red planet for years. Generated by the Mars Orbiter Laser Altimeter (MOLA), the high-resolution map represents 27 million measurements gathered in 1998 and 1999. http://ltpwww.gsfc.nasa.gov/tharsis/mola.html

Gamma Ray Burst Imaged for First Time

Astronomers racing the clock managed to take the first-ever-optical images of one of the most powerful explosions in the Universe — a gamma ray burst — just as it was occurring on Jan. 23, 1999. Such bursts occur with no warning and typically last just for a few seconds. http://science.nasa.gov/newhome/headlines/ast27jan99 1.htm

First Female Shuttle Commander

Orbiter Columbia's 26th flight (July 22-27) was led by Air Force Col. Eileen Collins, the first woman to command a Shuttle mission. STS-93 successfully carried to orbit the Chandra X-Ray Observatory, the third of NASA's "Great Observatories," joining the

Hubble Space Telescope and the Compton Gamma Ray Observatory. http://www.jsc.nasa.gov/Bios/htmlbios/collins.html

First Docking of Space Shuttle with International Space Station

STS-96 was the four-million-mile flight of Discovery, from May 27 to June 6, on which the crew performed the first Shuttle docking to the International Space Station and delivered more than 3600 pounds of supplies — ranging from food and clothes to laptop computers — for the first crew to live on the station next year. http://spaceflight.nasa.gov/shuttle/archives/sts-96/index.html

New Technology to Help Planes Land More Safely in Bad Weather

NASA and industry partners have developed new technology to allow planes to land safely in bad weather on parallel runways spaced as closely as 2,500 feet apart. Airports where this new approach, which expands on existing communication and navigation technology, could improve on-time arrivals are Detroit, Seattle, Minneapolis and Memphis. http://www.aero-space.nasa.gov/

Chandra, Third Great Observatory, Begins Work

After barely two months in space, NASA's Chandra X-Ray Observatory in September took a stunning image of the Crab Nebula, the most intensively studied object beyond our solar system and revealed something never seen before: a brilliant ring around the nebula's heart. http://chandra.nasa.gov

X-34 Rocket Plane Takes to the Sky for Safety Checks

Locked to the belly of its newly modified L-1011 carrier aircraft, a test version of NASA's X-34 rocket plane made its first flight in June as part of a certification process. The prototype of the robotic spacecraft will test new technologies and methods of operations needed to develop low-cost reusable space vehicles. http://stp.msfc.nasa.gov/pathfinder/pathindex.html

Flagship of NASA's Earth Observing System Launched

Almost on the eve of the millennium, Terra was launched into space from Vandenberg Air Force Base, CA, and was operating as expected. The mission will enable new research into the ways that Earth's land, oceans, air, ice and life interact as a whole climate system. http://terra.nasa.gov

Wallops Shorts.....

A NASA Terrier-Improved Orion sounding rocket was successfully launched and recovered on Dec. 17 from Wallops Island. The payload was a microgravity research experiment for principal investigator, Dr. Jungho Kim, University of Maryland.



Goddard Team:

The final gasps of the past year mark aerospace history books with three major events nearly colliding into each other: Terra launch, Hubble Space Telescope Servicing Mission and the smooth rollover for the Y2K.

Any one of these events can be considered a major investment; but the narrow proximity of time amongst all three proved once again that NASA is made of the right stuff. Further, Goddard's role in these missions and vigilant care and monitoring for Y2K to ensure safety for personnel, facilities and assets was nothing short of outstanding.

All of these efforts were noticed not only by the entire Goddard community, but also by our Associate Administrators Dr. Ed Weiler and Dr. Ghassem Asrar.

The Center also received congratulatory notes from several members of Congress that I've been asked to share with you. Copies of these letters are being distributed to members of the Executive Council. You've earned such positive and motivating comments.

Thank you to all who led, participated, contributed, facilitated and all in all cooperated during a stressful moment for Goddard. You and the entire workforce deserve congratulations for ending 1999 with a blissful sigh of relief. Thank you, and keep up the good work. The coming year offers equal if not more challenges to tackle.

John T. Riley Retires



John T. Riley (above) retired as Chief, Aircraft Office effective Dec. 31, 1999 after more than 22 years with NASA. Riley came to work for NASA following active duty in the U.S. Navy and service with Pan American World Airways, Inc. In 1960, Riley graduated from the U.S. Naval Academy and retired as a Naval Reserve Captain in 1990.

During his career with NASA Wallops Flight Facility, Riley served as Aviation Safety Officer and as Chief Pilot. He accumulated over 15,000 accident-free flight hours while flying several of the NASA aircraft.

Employees who travel on NASA 8 will miss Riley's smile and gentle welcome. His many friends and co-workers wish him a happy retirement and a strong tail wind as he completes unfulfilled travel plans.

1999 Awards Ceremony

During the Wallops Annual Awards Ceremony held Dec. 17, the following individuals and groups were recognized:

40 Years of Service

Brooks Shaw (not pictured)

35 Years of Service



Cliff Leitao (left) and Dennis Melvin. Not pictured: Warren Williams and Dick Bradford.

Litton PRC Announces Awards

Litton PRC recently announced the winners of the 1999 President's Excellence in Performance Award. Despite stiff competition from nominations throughout the company's international base of project teams, the Results Award was presented to the Roesler Sounding Rocket Team.

The Roesler Sounding Rocket Team successfully launched a NASA Terrier-Black Brant from the White Sands Missile Range (WSMR), N.M., for Principal Investigator, Dr. Fred Roesler of the University of Wisconsin. Team members are employed at NASA Wallops Flight Facility and the WSMR. The Aug. 24, 1999 launch was one of the first missions conducted under the new NASA Sounding Rocket Operations Contract (NSROC).



The Wallops Roesler Team (seated, left to right) Karl Haugh, Brent Edwards, Christina Merrill, Donna Galeone, Tracy Gibb and Charles Lankford. (standing) Mark Simko, Danny Tolbert, Gordon Marsh, Larry Rovin, Bill Lankford, and Bill Payne. Not pictured, Charles Roberts. The WSMR Roesler Team (not pictured) included: Tom Gonzales, Wendy Bedy, Ed Bedy, Carlos Martinez, Paul Evans, Rick Evavold, and Chris Christeson

30 Years of Service



Terry Sommers (left) and Steven Dunker. Not pictured: Brian Corbin and Dave Ward.

Goddard Annual Honor Award

<u>Center of Excellence</u> - Coqui II Sounding Rocket Campaign Team

Goddard Quarterly Honor Awards

Outstanding Teamwork - NASA Sounding Rocket Operations Contract SEB Team

UVSTAR Optical System Investigation, Redesign and Requalification Team

Quality and Process Improvements - The OASIS Team

Secretarial and Clerical Excellence -Gaye Muslimani, Carol Barrineau, Lisa Ward

<u>Customer Service Excellence</u> - Linda Wiles

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25 Years of Service



(left to right) Greg Parks, Wanamaker Lawrence, Terry Potterton, Gerry Morris, Delores Jester and Terry Ewell. Not pictured: Regina Waters, Jean Johnson and Bernice Merritt.

NASA Honor Awards

Public Service Group Achievement Award - Hurricane "Bonnie" Equipment Evacuation Team, Coquina Beach, NC

Exceptional Service Medal - Frank Lau

Public Service Medal - David Burkhead and Erich Klein, III

Group Achievement Award - NASA Sounding Rocket Team